**S1 Table. Demographic and clinical characteristics of patients with HCAP by risk category.**

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|  | HCAP (n=264) |
|  | Subgroup 1 (n=58) | Subgroup 2 (n=39) | Subgroup 3 (n=110) | Subgroup 4 (n=57) | *p-v*alue |
| Demographics |  |  |  |  |  |
| Male sex, No. (%) | 35 (60.9) | 23 (59.0) | 62 (56.4) | 37 (64.9) | 0.762 |
| Age, year (mean ± SD)  | 78.6 ± 10.2a | 75.1 ± 11.1ab | 69 ± 13.8bc | 67.4 ± 11.0c | 0.017 |
| BMI | 19.7 ± 3.9a | 20.1 ± 2.7ab | 22.9 ± 4.1b | 22.5 ± 4.9b | 0.011 |
| Medical comorbidities, No. (%) |  |  |  |  |  |
|  Chronic heart diseases  | 6 (10.3) | 6 (15.4) | 8 (7.3) | 6 (10.5) | 0.529 |
|  Neurovascular diseases  | 40 (69.0)a | 21 (53.8)a | 17 (15.5)b | 5 (8.8)b | <0.001 |
|  Chronic renal diseases | 4 (6.9)a | 6 (15.4)a | 11 (10.0)a | 29 (50.9)b | <0.001 |
|  Diabetes | 17 (29.3) | 17 (43.6) | 35 (31.8) | 23 (40.4) | 0.348 |
|  COPD  | 3(5.2) | 3 (7.7) | 15 (13.6) | 9 (15.8) | 0.221 |
|  Asthma  | 2 (3.4) | 2 (5.1) | 9 (8.2) | 1 (1.8) | 0.303 |
|  Structural lung diseases | 2 (3.4) | 2 (5.1) | 7 (6.4) | 2 (3.5) | 0.800 |
|  Liver cirrhosis  | 0 (0.0) | 0 (0.0) | 4 (3.6) | 2 (3.5) | 0.312 |
|  Hematologic malignancy | 2 (3.4) | 0 (0.0) | 2 (1.8) | 1 (1.8) | 0.678 |
|  Solid cancer  | 9 (15.5)a | 6 (15.4)a | 41 (37.3)b | 35 (61.4)c | <0.001 |
|  Rheumatologic diseases | 1 (1.7) | 0 (0.0) | 3 (2.7) | 0 (0.0) | 0.462 |
|  Immunosuppressant use | 1 (1.7) | 1 (2.6) | 9 (8.2) | 5 (8.8) | 0.225 |
|  Solid organ transplantation | 0 (0.0) | 1 (2.5) | 0 (0.0) | 0 (0.0) | 0.122 |
|  Charlson Comorbidity Index  | 5.1 ± 1.9 | 5.4 ± 2.5 | 5.0 ± 3.2 | 6.1 ± 1.9 | 0.057 |
| Medical device use, No. (%)  |  |  |  |  |  |
|  Tracheostomy\* | 3 (5.2)ab | 6 (15.4)b | 2 (1.8)a | 0 (0.0)a | 0.001 |
|  Tube feeding  | 9 (15.5)a | 10 (25.6)a | 5 (4.5)b | 0 (0.0)b | <0.001 |
| Antibiotic resistance related risk factor, No. (%) |  |  |  |  |
|  Prior IV antibiotic use within 90 days  | 0 (0)a | 27 (69.2)c | 75 (68.2)b | 0 (0)a | <0.001 |
|  Long-term care facility  | 58 (100)a | 39 (100)a | 0 (0)b | 0 (0)b | <0.001 |
|  Prior hospitalization within 90 days | 0 (100)a | 30 (76.9)b | 92 (83.6)b | 0 (0)c | <0.001 |
|  Chemotherapy  | 0 (0)a | 2 (5.1)a | 22 (20)b | 30 (52.6)c | <0.001 |
|  Hemodialysis | 2 (3.4)a | 2 (5.1)a | 4 (3.6)a | 27 (47.4)b | <0.001 |
|  Prior MRSA isolation | 3 (5.4) | 8 (7.3) | 3 (7.7) | 0 (0) | 0.213 |
|  Prior *P. aeruginosa* isolation | 2 (3.6) | 10 (9.5) | 4 (10.3) | 2 (3.6) | 0.308 |
| Pneumonia Severity |  |  |  |  |  |
|  CURB65, median (IQR) | 2 (2-3)a | 2 (1-3)ab | 2 (1-2)b | 2 (1-2)b | <0.001 |
|  Pneumonia severity index, mean±SD | 135.5 ± 34.1a | 131.0 ± 35.6ab | 115.4 ± 45.9b | 121.7 ± 32.0ab | 0.006 |
|  Mechanical ventilator†, No. (%) | 21 (36.2)a | 14 (35.9)a | 19 (17.3)b | 12 (21.1)ab | 0.016 |
|  Bacteremia, No. (%)  | 6 (10.3) | 4 (10.3) | 8 (7.3) | 5 (8.8) | 0.897 |
| Clinical outcomes |  |  |  |  |  |
|  Duration of ICU admission, Days (mean±SD) | 9.3 ± 13.7 | 7.6 ± 11.9 | 3.3 ± 8.2 | 3.1 ± 8.9 | 0.285 |
| 30-day mortality, No. (%)  | 7 (12.1) | 5 (12.8) | 17 (15.5) | 10 (17.5) | 0.839 |
| The values with different superscript letters in a column are significantly different (*P*<0.05)Abbreviations: HCAP, healthcare-associated pneumonia; SD, standard deviation; BMI, body mass index; COPD, chronic obstructive pulmonary diseases; HIV, human immunodeficiency virus; IV, intravenous; ICU, intensive care unit; LTCF, long-term care facility; MRSA, methicillin-resistant *Staphylococcus aureus; P. aeruginosa, Pseudomonas aeruginosa*.Subgroup 1: LTCF-onset HCAP without a history of prior hospitalization and intravenous antibiotic use within the past 90 days. Subgroup 2: LTCF-onset HCAP with a history of prior hospitalization or intravenous antibiotic use within the past 90 days. Subgroup 3: Community-onset HCAP with a history of prior hospitalization or intravenous antibiotic use within the past 90 days. Subgroup 4: Community-onset HCAP without a history of prior hospitalization and intravenous antibiotic use within the past 90 days.\* Tracheostomy undergone before the diagnosis of pneumonia was investigated† The number included both the cases on MV after the diagnosis of pneumonia and those with VAP |